

Title (en)
COMPRESSOR ROTOR BLADE AIRFOIL

Title (de)
SCHAUFELBLATT FÜR VERDICHTERLAUFSCHAUFEL

Title (fr)
PROFIL AÉRODYNAMIQUE D'AUBE ROTORIQUE DE COMPRESSEUR

Publication
EP 4083387 A1 20221102 (EN)

Application
EP 22169532 A 20220422

Priority
• IN 202111019950 A 20210430
• US 202117305908 A 20210716

Abstract (en)
A rotor blade (44) includes an airfoil (100) having an airfoil shape (150). The airfoil shape (150) has a nominal profile substantially in accordance with Cartesian coordinate values of X, Y and Z set forth in one of Table I, Table II, Table III, Table IV, Table V, Table VI, Table VII, Table VIII, or Table IX. The Cartesian coordinate values of X, Y and Z are non-dimensional values from 0% to 100% convertible to dimensional distances expressed in a unit of distance by multiplying the Cartesian coordinate values of X, Y and Z by a scaling factor of the airfoil in the unit of distance. The X and Y values, when connected by smooth continuing arcs, define airfoil profile sections at each Z value. The airfoil profile sections at Z values are joined smoothly with one another to form a complete airfoil shape.

IPC 8 full level
F01D 5/14 (2006.01); **F04D 29/38** (2006.01)

CPC (source: CN EP)
F01D 5/141 (2013.01 - EP); **F04D 29/324** (2013.01 - CN EP); **F05D 2220/3218** (2013.01 - EP); **F05D 2220/3219** (2013.01 - EP); **F05D 2240/301** (2013.01 - EP); **F05D 2240/305** (2013.01 - EP); **F05D 2240/306** (2013.01 - EP); **F05D 2250/38** (2013.01 - EP); **F05D 2250/74** (2013.01 - EP)

Citation (search report)
• [IY] US 2013336798 A1 20131219 - DUTKA MICHAEL JAMES [US], et al
• [Y] WO 2019012102 A1 20190117 - SIEMENS AG [DE]
• [IY] EP 1624158 A2 20060208 - GEN ELECTRIC [US]
• [Y] WO 2015178974 A2 20151126 - UNITED TECHNOLOGIES CORP [US]
• [IY] US 2014030098 A1 20140130 - DUTKA MICHAEL JAMES [US], et al
• [Y] EP 1505302 A1 20050209 - GEN ELECTRIC [US]
• [I] EP 1921258 A2 20080514 - GEN ELECTRIC [US]

Designated contracting state (EPC)
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Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

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DOCDB simple family (application)
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